

SEQUENCE

SEQ ID NO: 1

Sequence Length: 780

Sequence Type: Nucleic acid

Strandedness: Double

Topology: Linear

Molecular Type: cDNA

Sequence

TGGTGAAGCT CTAAACGGCTG TTTTGACTGG CGTAGCCGGA GCCGGCGACG TGAGGCGGGC 60  
 GTTGCTCGCG CGACAAGTAG TTGCTGGGAC AGCGAA ATG GAG GGG TGT GTG TCT 114  
 Met Glu Gly Cys Val Ser  
 1 5  
 AAC CTA ATG GTC TGC AAC CTG GCC TAC AGC GGG AAG CTG GAA GAG TTG 162  
 Asn Leu Met Val Cys Asn Leu Ala Tyr Ser Gly Lys Leu Glu Glu Leu  
 10 15 20  
 AAG GAG AGT ATT CTG GCC GAT AAA TCC CTG GCT ACT AGA ACT GAC CAG 210  
 Lys Glu Ser Ile Leu Ala Asp Lys Ser Leu Ala Thr Arg Thr Asp Gln  
 25 30 35  
 GAC AGC AGA ACT GCA TTG CAC TGG GCA TGC TCA GCT GGA CAT ACA GAA 258  
 Asp Ser Arg Thr Ala Leu His Trp Ala Cys Ser Ala Gly His Thr Glu  
 40 45 50  
 ATT GTT GAA TTT TTG TTG CAA CTT GGA GTG CCA GTG AAT GAT AAA GAC 306  
 Ile Val Glu Phe Leu Leu Gln Leu Gly Val Pro Val Asn Asp Lys Asp  
 55 60 65 70  
 GAT GCA GGT TGG TCT CCT CTT CAT ATT GCG GCT TCT GCT GGC CGG GAT 354  
 Asp Ala Gly Trp Ser Pro Leu His Ile Ala Ala Ser Ala Gly Arg Asp  
 75 80 85  
 GAG ATT GTA AAA GCC CTT CTG GGA AAA GGT GCT CAA GTG AAT GCT GTC 402  
 Glu Ile Val Lys Ala Leu Leu Gly Lys Gly Ala Gln Val Asn Ala Val  
 90 95 100  
 AAT CAA AAT GGC TGT ACT CCC TTA CAT TAT GCA GCT TCG AAA AAC AGG 450  
 Asn Gln Asn Gly Cys Thr Pro Leu His Tyr Ala Ala Ser Lys Asn Arg  
 105 110 115  
 CAT GAG ATC GCT GTC ATG TTA CTG GAA GGC GGG GCT AAT CCA GAT GCT 498  
 His Glu Ile Ala Val Met Leu Leu Glu Gly Gly Ala Asn Pro Asp Ala  
 120 125 130

001005265000

SEQ ID NO: 2  
Sequence Length: 226  
Sequence Type: Amino acid  
Topology: Linear  
Molecular Type: Protein

| Sequence |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Met      | Glu | Gly | Cys | Val | Ser | Asn | Leu | Met | Val | Cys | Asn | Leu | Ala | Tyr | Ser |  |
| 1        |     |     |     | 5   |     |     |     | 10  |     |     |     | 15  |     |     |     |  |
| Gly      | Lys | Leu | Glu | Glu | Leu | Lys | Glu | Ser | Ile | Leu | Ala | Asp | Lys | Ser | Leu |  |
| 20       |     |     |     | 25  |     |     |     | 30  |     |     |     |     |     |     |     |  |
| Ala      | Thr | Arg | Thr | Asp | Gln | Asp | Ser | Arg | Thr | Ala | Leu | His | Trp | Ala | Cys |  |
| 35       |     |     |     | 40  |     |     |     | 45  |     |     |     |     |     |     |     |  |
| Ser      | Ala | Gly | His | Thr | Glu | Ile | Val | Glu | Phe | Leu | Leu | Gln | Leu | Gly | Val |  |
| 50       |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |     |     |  |
| Pro      | Val | Asn | Asp | Lys | Asp | Asp | Ala | Gly | Trp | Ser | Pro | Leu | His | Ile | Ala |  |
| 65       |     |     |     | 70  |     |     |     | 75  |     |     |     | 80  |     |     |     |  |
| Ala      | Ser | Ala | Gly | Arg | Asp | Glu | Ile | Val | Lys | Ala | Leu | Leu | Gly | Lys | Gly |  |
| 85       |     |     |     | 90  |     |     |     | 95  |     |     |     |     |     |     |     |  |
| Ala      | Gln | Val | Asn | Ala | Val | Asn | Gln | Asn | Gly | Cys | Thr | Pro | Leu | His | Tyr |  |
| 100      |     |     |     | 105 |     |     |     | 110 |     |     |     |     |     |     |     |  |

SEQ ID NO: 3  
Sequence Length: 693  
Sequence Type: Nucleic acid  
Strandedness: Double  
Topology: Linear  
Molecular Type: cDNA  
Sequence

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ATG | GAG | GGG | TGT | GTG | TCT | AAC | ATA | ATG | ATC | TGT | AAC | CTG | GCC | TAC | AGT | 48  |
| Met | Glu | Gly | Cys | Val | Ser | Asn | Ile | Met | Ile | Cys | Asn | Leu | Ala | Tyr | Ser |     |
|     |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| GGG | AAG | CTG | GAT | GAG | TTG | AAG | GAG | CGC | ATT | TTG | GCT | GAT | AAA | TCT | CTG | 96  |
| Gly | Lys | Leu | Asp | Glu | Leu | Lys | Glu | Arg | Ile | Leu | Ala | Asp | Lys | Ser | Leu |     |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| GCT | ACT | AGA | ACT | GAT | CAG | GAC | AGC | AGA | ACA | GCT | TTG | CAC | TGG | GCA | TGC | 144 |
| Ala | Thr | Arg | Thr | Asp | Gln | Asp | Ser | Arg | Thr | Ala | Leu | His | Trp | Ala | Cys |     |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |
| TCA | GCT | GGC | CAT | ACA | GAA | ATT | GTT | GAA | TTC | TTG | CTG | CAA | CTT | GGA | GTG | 192 |
| Ser | Ala | Gly | His | Thr | Glu | Ile | Val | Glu | Phe | Leu | Leu | Gln | Leu | Gly | Val |     |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |

SEQ ID NO: 4  
Sequence Length: 231  
Sequence Type: Amino acid  
Topology: Linear  
Molecular Type: Protein

[illegible]

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SEQ ID NO: 5
Sequence Length: 693
Sequence Type: Nucleic acid
Strandedness: Double
Topology: Linear
Molecular Type: cDNA

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Sequence

|   |     |
|---|-----|
| ATG GAG GGG TGT GTG TCT AAC CTA ATG GTC TGT AAC CTG GCC TAC AAC | 48  |
| Met Glu Gly Cys Val Ser Asn Leu Met Val Cys Asn Leu Ala Tyr Asn |     |
| 5 10 15   |     |
| GGG AAG CTG GAT GAG TTG AAG GAA AGC ATT TTG GCT GAT AAG TCT CTG | 96  |
| Gly Lys Leu Asp Glu Leu Lys Glu Ser Ile Leu Ala Asp Lys Ser Leu |     |
| 20 25 30  |     |
| GCC ACT AGA ACT GAT CAG GAC AGC AGA ACA GCA TTG CAC TGG GCA TGC | 144 |
| Ala Thr Arg Thr Asp Gln Asp Ser Arg Thr Ala Leu His Trp Ala Cys |     |
| 35 40 45  |     |
| TCA GCT GGT CAT ACA GAA ATT GTT GAA TTC TTG CTG CAA CTT GGA GTG | 192 |
| Ser Ala Gly His Thr Glu Ile Val Glu Phe Leu Leu Gln Leu Gly Val |     |
| 50 55 60  |     |
| CCA GTA AAT GAA AAA GAC GAT GCA GGT TGG TCT CCT CTT CAT ATT GCT | 240 |
| Pro Val Asn Glu Lys Asp Asp Ala Gly Trp Ser Pro Leu His Ile Ala |     |
| 65 70 75 80   |     |
| GCT TCC GCT GGC CGG GAT GAG ATT GTA AAA GCC CTT CTG ATA AAA GGG | 288 |
| Ala Ser Ala Gly Arg Asp Glu Ile Val Lys Ala Leu Leu Ile Lys Gly |     |
| 85 90 95  |     |
| GCA CAA GTG AAT GCC GTC AAT CAG AAT GGC TGC ACG GCC CTT CAT TAT | 336 |
| Ala Gln Val Asp Ala Val Asn Gln Asn Gly Cys Thr Ala Leu His Tyr |     |
| 100 105 110   |     |
| GCA GCT TCC AAG AAT AGG CAT GAG ATT GCT GTT ATG TTA CTA GAA GGT | 384 |
| Ala Ala Ser Lys Asn Arg His Glu Ile Ala Val Met Leu Leu Glu Gly |     |
| 115 120 125   |     |
| GGG GCT AAT CCA GAT GCT AAG AAC CAT TAT GAT GCT ACA GCA ATG CAC | 432 |
| Gly Ala Asn Pro Asp Ala Lys Asn His Tyr Asp Ala Thr Ala Met His |     |
| 130 135 140   |     |
| CGG GCA GCA GCC AAG GGT AAC TTG AAG ATG GTT CAT ATC CTT CTG TTC | 480 |
| Arg Ala Ala Ala Lys Gly Asn Leu Lys Met Val His Ile Leu Leu Phe |     |
| 145 150 155 160   |     |
| TAC AAA GCA TCC ACA AAC ATC CAA GAT ACT GAG GGT AAC ACT CCT CTA | 528 |
| Tyr Lys Ala Ser Thr Asn Ile Gln Asp Thr Glu Gly Asn Thr Pro Leu |     |
| 165 170 175   |     |
| CAC TTA GCC TGT GAT GAG GAG AGA GTG GAA GAA GCA AAA TTG CTG GTG | 576 |
| His Leu Ala Cys Asp Glu Glu Arg Val Glu Glu Ala Lys Leu Leu Val |     |
| 180 185 190   |     |

0050975-033100

ACC CAA GGA GCA AGT ATT TAC ATT GAA AAT AAG GAA GAA AAG ACA CCG 624  
 Thr Gln Gly Ala Ser Ile Tyr Ile Glu Asn Lys Glu Glu Lys Thr Pro  
 195 200 205  
 CTG CAA GTC GCG AAA GGG GGC CTG GGT TTA ATA CTC AAA AGA ATC GCA 672  
 Leu Gln Val Ala Lys Gly Gly Leu Gly Leu Ile Leu Lys Arg Ile Ala  
 210 215 220  
 GAA AGT GAA GAG GCT TCT ATG TAG 720  
 Glu Ser Glu Glu Ala Ser Met  
 225 230

SEQ ID NO: 6  
 Sequence Length: 231  
 Sequence Type: Amino acid  
 Topology: Linear  
 Molecular Type: Protein  
 Sequence

Met Glu Gly Cys Val Ser Asn Leu Met Val Cys Asn Leu Ala Tyr Asn  
 1 5 10 15  
 Gly Lys Leu Asp Glu Leu Lys Glu Ser Ile Leu Ala Asp Lys Ser Leu  
 20 25 30  
 Ala Thr Arg Thr Asp Gln Asp Ser Arg Thr Ala Leu His Trp Ala Cys  
 35 40 45  
 Ser Ala Gly His Thr Glu Ile Val Glu Phe Leu Leu Gln Leu Gly Val  
 50 55 60  
 Pro Val Asn Glu Lys Asp Asp Ala Gly Trp Ser Pro Leu His Ile Ala  
 65 70 75 80  
 Ala Ser Ala Gly Arg Asp Glu Ile Val Lys Ala Leu Leu Ile Lys Gly  
 85 90 95  
 Ala Gln Val Asn Ala Val Asn Gln Asn Gly Cys Thr Ala Leu His Tyr  
 100 105 110  
 Ala Ala Ser Lys Asn Arg His Glu Ile Ala Val Met Leu Leu Glu Gly  
 115 120 125  
 Gly Ala Asn Pro Asp Ala Lys Asn His Tyr Asp Ala Thr Ala Met His  
 130 135 140  
 Arg Ala Ala Ala Lys Gly Asn Leu Lys Met Val His Ile Leu Leu Phe  
 145 150 155 160  
 Tyr Lys Ala Ser Thr Asn Ile Gln Asp Thr Glu Gly Asn Thr Pro Leu  
 165 170 175

007EE0"54260560

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SEQ ID NO: 7
Sequence Length: 15
Sequence Type: Amino acid
Topology: Linear
Molecular Type: Peptide
Sequence
Met Glu Gly Cys Val Ser Asn Leu Met Val Cys Asn Leu Ala Tyr
1 5 10 15

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20

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